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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,217

11/02/2007

Klaus-Robert Muller

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EXAMINER

HOLMES, MICHAEL B

ART UNIT

PAPER NUMBER

2129

MAIL DATE

DELIVERY MODE

07/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,217	Applicant(s) MULLER ET AL.	
	Examiner MICHAEL HOLMES	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23 and 43 is/are rejected.
- 7) ☒ Claim(s) 24-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/10/2009</u> . | 6) <input type="checkbox"/> Other: _____ |



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Examiner's Detailed Office Action

1. This Office Action is responsive to communication, filed 11/02/2007.

Information Disclosure Statement

2. Applicant is respectfully remind of the Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by continuing to submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's of application or thereafter.

Drawings

3. The formal drawings submitted have been reviewed by the Office of Initial Patent Examination (OIPE) and/or the USPTO Office of Draftperson's Patent Drawings Review.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 23 & 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cauwenberghs et al. "Incremental and Decremental Support Vector Machine Learning"

Advances in Neural Information Processing Systems, NIPS 2000, Vol. 13, 2001

in view of

Tax et al. "Support vector domain description" Pattern Recognition Letters, Vol. 20, 1999.

Regarding claims 23 & 43.

Cauwenberghs et al. describes a method & system for the automatic online detection and classification of anomalous objects in a data stream, comprising the steps of: a) detecting at least one incoming data stream containing normal and anomalous objects, [see Cauwenberghs et al., Abstract, Sections 1-4] b) constructing a geometric representation of normality of the incoming objects of the data stream at a time (t1) subject to at least one predefined optimality conditions, [see Cauwenberghs et al., Abstract, Sections 1-4] c) geometrically representing an optimal normality, d) adapting the geometric representation of normality in respect to at least one received object at a time (t2), which is greater than t1, wherein the adaptation is subject to at least one predefined optimality condition, [see Cauwenberghs et al., Abstract, Sections 1-4] e) determining a normality/anomaly classification for received objects at t2 in respect to the geometric representation of normality, [see Cauwenberghs et al., Abstract, Sections 1-4] f)

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classifying normal objects and anomalous objects based on the generated normality classification and generating a data set describing the anomalous data for further processing [see Cauwenberghs et al., Abstract, Sections 1-4] b) an automatic online anomaly detection engine, comprising: an automatic construction means for constructing a geometric representation of normality for the incoming objects of the data stream at a time (t_1) subject to at least one predefined optimality condition, with an automatic online adaptation means for adapting the geometric representation of normality in respect to received at least one received object at a time (t_2), which is greater than t_1 , the adaptation being subject to at least one predefined optimality condition, a means for geometrically representing an optimal normality, and an automatic online determination means for determining a normality classification for received objects at t_2 in respect to the geometric representation of normality, and c) an automatic classification means for classifying normal objects and anomalous objects based on the generated normality classification and generating a data set describing the anomalous data for further processing. [see Cauwenberghs et al., Abstract, Sections 1-4]

Cauwenberghs et al. does not teach anomaly detection and optimal normality. However, Tax et al. teaches teach anomaly detection and optimal normality. [see Tax et al., Abstract, Sections 1-3] It would have been obvious at the time the invention was made to a persons having ordinary skill in the art to combine Cauwenberghs et al. with Tax et al. because Tax et al. relates to determining normality of anomalous objects in a data stream and determining the condition in which optimal geometric representation can be found.

Claim Objection(s)

7. Claims 24-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Interpretation

8. The claims and only the claims form the metes and bounds of the invention. “Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Moreover, limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d, 1393, 1404-05, 162 USPQ 541,550-551 (CCPA 1969)” (MPEP p 2100-8, c 2,145-48; p 2100-9, c 1,1 1-4).

9. The Examiner has full latitude to interpret each claim in the broadest reasonable sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

10. Examiner’s Notes are/if provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the citations are self-explanatory to one skilled in the art and do not need any further explanation. Moreover, the Examiner’s Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently or obviously appropriate.

11. Unless otherwise annotated, as aforementioned, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent or obviousness prima facie case or statement(s).

Correspondence Information

12. Any inquires concerning this communication or earlier communications from the examiner should be directed to Michael B. Holmes, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-3686 or facsimile transmission (571) 273-3686 or email michael.holmesb@uspto.gov.

If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor (SPE), Don Sparks, may be reached at (571) 272-4201.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Finally, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Moreover, status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more

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information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) toll-free @ 1-866-217-9197.

Michael B. Holmes

Primary Examiner

Artificial Intelligence

Art Unit 2129

United States Department of Commerce

Patent & Trademark Office

Sunday, July 18, 2010

MBH

/Michael B. Holmes/

Primary Examiner, Art Unit 2129